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from doubles with doubles, and doubles with singles, both produce singles. Should these resulting singles seed, or if the pollen of these singles is fertile upon other singles, a very limited number of the resulting progeny may be double. This seems remarkable, but if we recall that the unit or genetic character of doubleness is possessed by these flowers, the resulting doubles in the progeny of these flowers may be explained.

In regard to changing the form, we have a variety called "Coral" (H. Schizopetalus) which resembles a delicate piece of pink coral and is illustrated at "B" in Figure 1. We regret that it is impossible to reproduce the pictures from the source of material we have. We have changed the wording a little so that you will understand what Mr. Gartley is referring to in the pictures. - Ed.) Flowers "A" (shows a double) and "C" (shows a fringed single like Dainty or La France) of Figure 1 are the result of cross-pollinating with "B" (the Coral hibiscus); "A" (the double) resulted from crossing the coral hibiscus on what is known as Red Carnation, and "C" (the fringed single) resulted from crossing Coral on a single hibiscus. It will be readily noted that the dark colors of the femal parent have been retained, but that both in the double and the single crosses the resulting flowers show a marked fringing of the edges of the petals. It is therefore possible to obtain fringed flowers, both single and double, through the medium of the Coral flower "B". Further study of heredity would indicate that if the pollen from "A" and "C" should prove fertile that either of these flowers may be used in further crossing to produce fringed flowers, insomuch as both of them have this genetic character derived from the original parent "B". A single fringed white flower resembling as nearly as possible the Coral in shape is one of the future possibilities, and is being earnestly worked for.

As to breeding for color a great deal yet remains to be known. The majority of crosses between the

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whites and yellows and the whites and reds has resulted in pink flowers of all shades; thus the results show no resemblance to either parent, and it is almost beyond belief that a dark red flower, when crossed on pure white, should produce a shell pink, and that a pure dark yellow when crossed on pure white should entirely lose its yellow character, resulting likewise in a shell pink colored flower. Yet, this is the case.

The first generation cross resulting in a hybrid, and these flowers frequently do not reproduce seed. Either they cannot be fertilized themselves or their pollen is not fertile on other flowers. A few of these, however, do seed, and by self-pollinating these flowers, the original colors, yellow and red, of the parents may be reproduced, and the size, texture and shape probably greatly improved. These flowers can also be cross-pollinated with the pollen of another flower possessing desirable characters, and thus almost any character desired may be separated out and bred into a new flower. It is true of almost all heredity that the strong characters are the ones which dominate in the resulting cross, thus - a handsome flower upon a bush with poor foliage may be bred into an inferior flower on a bush with strong rich foliage, and the character of a large flower and strong rich foliage be the result. The advanced workers are endeavoring to produce a large double white flower resembling in character the well-known peach-blow, but without the color. This will probably be produced from a self-fertilized, single hybrid, resulting from a cross between a pure white and a large double flower.

Perhaps only those observers and those who have worked upon these flowers would notice the seed-pod on the hibiscus. Figure 11 illustrates such a pod. The flower illustrated in this cut is also very unique both in color and in shape. The color is a brilliant salmon orange, and the center is marked with deep claret and pure white. It will be noticed also that instead of the usual pistil-tube surmounted with pollen and stigmata, the end of the pistil tube of this flower has developed a number of petals, thus marking it as a semi-double. The stigmata and pollen

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